

REMARKS

The Office Action of March 12, 2003 has been received and carefully studied. In response thereto, applicant has amended the claims to clarify the invention and the scope of the invention.

The present invention describes and claims a non-slip, non-adhesive shelf liner sheet. The shelf liner is resilient and flexible. The shelf liner is curl resistant. Curl resistance, the ability to lay flat and not curl up at the edges, is an important aspect of the product. The product is a consumer product for use in the home and the like. As such, it must have a pleasing appearance when employed in its intended use. Portions of the sheet material of the present invention will be cut to fit a particular shelf and laid upon the shelf. It is non-adhesive. Nothing but its own internal characteristics will prevent it from curling up at the edges. A curled up shelf liner has an unpleasing appearance. Thus, applicant created a non-slip non-adhesive resilient flexible curl resistant shelf liner having only a film layer and foam layer.

Several references are used in the rejection of claims.

Hawley 5,854,144 describes a shelf liner material using three distinct layers: a PVC plastic top layer, a fabric intermediate layer and a non-skid foam bottom layer. Hawley does not teach a non-slip shelf liner consisting of a thin continuous plastic top film having a continuous foam layer directly adjacent to the film adhering to the film. Rather, Hawley teaches the imposition of an intermediate fabric layer.

Alderfer 3,223,568 teaches a method of making a laminate in which an extremely large cylinder of foam is rotated and peeled by a moving knife. The knife slices a thin layer off the surface of the foam cylinder and brings this slice into contact with a PVC film which has been melted on one side. Alderfer is not addressing the problem of curl in shelf liners. It is suspected that the Alderfer

product would have significant curl problems as the foam used in Alderfer is cut from a cylindrical shape by peeling and would naturally have an arcuate relaxed shape. Moreover, as the peeling process continues, the radius of curvature of the layer being cut would become smaller and smaller leading to a greater and greater tendency to curl. Alderfer does not mention non-slip characteristics. In the Office Action, it is asserted that Alderfer teaches a foam film laminate having a top polyethylene surface directly extruded on to a bottom polyurethane foam layer (column 3, lines 2 and 2-22). It is respectfully submitted that this is not the case. Rather, Alderfer takes a preexisting foam layer and a preexisting PVC film and melts the PVC film to cause the PVC to adhere to the foam. This is not an extrusion. It is a melting of an already made film. Moreover, Alderfer is not flame treating to create a surface skin characteristic. Rather, Alderfer takes an existing PVC film which is very substantial in thickness ("in any event, the film 50 is preferably very thin (e.g. 10 mil. vinyl film)" column 3, lines 4 and 5). While Alderfer characterizes 10 mils as very thin, in today's technology, 10 mils is a substantially thick film.

Breitscheidel, et al. 4,917,944 describes a plastic sheet material suitable for use in automotive body panel construction. This is not a thin film or shelf liner, this is almost a structural element. Breitscheidel describes a thermoplastic elastomer mixture suitable for creating sheets which can be formed by drawing or the like into substantially rigid parts used in automobile construction. Breitscheidel is not describing use of thin films which are flexible and resilient. Breitscheidel does not talk about non-slip characteristics or curl resistance at any point. In columns 7 and 8, Breitscheidel describes joining a structural sheet to a body of cross link polyolefin foam material. The foam is preexisting. The foam is joined by flame laminating or by thermo pressure bonding. In column 10 this is described as heating selected layers to a temperature lying above the plasticizing

temperature. Thus, one is dealing with a preexisting sheet and a preexisting foam one of which is melted and adhered to the other. In the example described in the lower half of column 10, these two layers are bonded together by means of an adhesive. The joined product is then formed into a finished rigid structure. Curl resistance is not an issue: the structure is "permanently shaped" (col. 10, line 18).

Neuhaus 5,296,181 teaches a process for creating molded products. Neuhaus is concerned with the adherence of a foam body and covering layer in a flexible semirigid or rigid molding. Neuhaus is not concerned with sheet materials used for shelf liners or the like. Neuhaus does not teach non-slip characteristics or the creation of a sheet material which will be non-adhesive on one side. Rather, it appears Neuhaus teaches the creation of a foam body in which a film is placed in a mold and reactive materials then are introduced in the mold. The films used in Neuhaus include metal, or resins such as polyester or polyepoxide PVC, textiles or wood. Polypropylene or other polyolefins are not mentioned.

Hartzell, et al. 3,713,925 describes an asbestos product in which polyurethane, vinyl chloride, polystyrene, epoxy, phenolic urea-formaldehyde, silicone, acrylic cellulose acetate, cellular rubber latexes, rubber, acrylonitrile-butadiene-styrene polyester, polycarbonate, polyamide, polyethylene, and the like foams are formed in contact with an asbestos sheet material. The asbestos sheet material is not a plastic film but rather a non-woven or woven asbestos sheet. Hartzell teaches nothing concerning a non-slip, non-adhesive curl resistant sheet material wherein a foam adheres directly to a thin polyolefin film.

Response to Restriction Requirement

Applicant confirms the election made with traverse on February 10, 2003 to pursue claims

1-15 in this application and acknowledges that claims 16-31 are withdrawn from further consideration by the Examiner. Claims 16-31 are being cancelled herewith, without prejudice, as subject to a restriction requirement, subject to potential prosecution in a divisional application or reinstatement in this case should a generic claim be found allowable by the Examiner. ✓

Claim Objections

Claim 7 stands objected to as being a substantial duplicate of claim 4. Claim 7 is cancelled herewith.

Claim 8 is objected to as containing an improper dependency. Claim 8 is amended herewith to depend from claim 1 which is believed to address the problem identified.

Claim Rejections

Claim 1 is rejected as anticipated by Hawley '144. Specifically, the Office Action asserts that claim 1 does not require that the continuous foam layer be adjacent to the plastic top film. Claim 1 is amended herewith to specifically require that the foam layer be adjacent to the film layer. That structure is not seen or taught in Hawley '144. It is submitted that the claim is not anticipated.

Claims 1-4, 7 and 8 are rejected as being anticipated by Alderfer '568. The Action asserts that Alderfer teaches a foam film laminate having a top polyethylene layer directly extruded on to a bottom polyurethane foam layer. The rejection also asserts that the film has been flame treated to promote adhesion. Applicant respectfully submits that this reading of Alderfer is not justified. Any reasonable reading of Alderfer does not anticipate the claims as now amended. Alderfer teaches use of a thick (ten mil) film which is melted by application of a flame to one side while being cooled on the other side by a chilled roller. The melted side of the film is brought into contact with a large cylindrical foam body. The film which is now in close contact with the foam body is further chilled

by application of a cold air stream and the foam body is then sliced with a knife. The structure created will inherently be "curly". Nothing in this structure or in the process of creating it teaches a mechanism for creating or a structure which will be non-slip. Claim 1 as currently amended also requires that the foam layer be cast on the film. None of the structural requirements of claim 1 are taught by Alderfer. It is therefore submitted that claim 1 and the claims which depend upon claim 1 (all of the rejected claims) are therefore not anticipated and allowable over Alderfer.

Claims 1-10 are rejected as anticipated by Breitscheidel '944. Breitscheidel is providing a rigid deep drawn product. The products created are panels used in automobile construction. While the products many have some flexibility, they are essentially formed rigid panels. Breitscheidel also describes a foam on a panel structure which is created by creating the panel, creating the foam and then joining the two by thermal pressure bonding or flame laminating. These processes are usable with thick rigid panels. They do not result in a thin continuous flexible film with a foam back of the type usable as shelf liners. Raising the temperature of a thin (3 mils) film for thermo pressure bonding or flame laminating is likely to distort the film and will interfere with curl resistant properties. However, this is of no importance to Breitscheidel as he is discussing creation of primarily rigid structures. See for instance column 10, lines 15-20. Nothing in Breitscheidel anticipates a resilient, flexible, non-slip, non-adhesive curl resistant sheet material for covering household surfaces as required in claim 1. While Breitscheidel does talk about films, it does not anticipate a thin continuous polyolefin film upon which a continuous foam layer of uniform thickness is cast. All these structures are required in claim 1. The claim and all the claims dependent thereon are not anticipated.

Claims 1 and 15 are rejected as anticipated by Neuhaus '181. Neuhaus is concerned with

molded parts, not thin flexible sheet material. Neuhaus does not talk about a non-slip non-adhesive curl resistant sheet material. These structures are required in claim 1 and not anticipated by Neuhaus. Neuhaus does not describe use of a polyolefin top film. Rather, Neuhaus suggests polyester or polyepoxide resins. The claims are not anticipated.

Claim 11 is rejected as obvious over Alderfer '568. Nothing in Alderfer teaches a product having non-slip characteristics. Nothing in Alderfer teaches a product having curl resistance. In fact, the Alderfer product, which is cut from a large cylinder, would likely have curl problems. Nothing in Alderfer teaches a product in which a foam layer is cast on a polyolefin film. Nothing in Alderfer teaches any of these structures with reference to a covering for household surfaces. As these structures are required in claim 1 and claim 11 dependent upon claim 1, claim 11 is not made obvious. Furthermore, nothing in Alderfer teaches giving a film a skin characteristic adapted to enhance adhesion of the foam layer as required in claim 2. Rather, Alderfer teaches melting a face of the film and immediately bringing a preexisting foam cylinder into contact with the melted face of the film. Alderfer does not create a skin characteristic on the film as required in claim 2 and hence claim 11.

Claims 5, 6, 10 and 12 are rejected as being obvious over Alderfer in view of Hartzell. Hartzell teaches adhering a cellular foam to asbestos paper. There is no reason for one seeking to laminate foam onto film to look to Hartzell which is laminating foam onto asbestos paper. The substrates are fundamentally different and adhesion problems will be fundamentally different. There is no teaching in either reference which would lead one to look to the other reference in making a foam materials choice. Moreover, and more importantly, neither reference is addressing the curl problem being addressed by applicant and neither reference is casting a foam directly upon a

polyolefin film. There is no teaching to combine the references as suggested. Even combined, the references do not teach the subject matter now recited in claim 1 and hence the rest of the claims rejected under this combination.

Claims 11-14 are rejected as being obvious over Breitscheidel. Breitscheidel does not describe a resilient, flexible, non-slip, non-adhesive curl resistant sheet material of the type used for covering household surfaces. Breitscheidel does not describe the casting of a foam layer on a polyolefin top film. All of these structures are required in claim 1. Claims 11-14 are dependent on claim 1 and not made obvious for this reason.

Additionally, the Office Action asserts that thicknesses are not critical in this application and that Breitscheidel's teaching of a foam layer thickness of from 2 to 20 millimeters and a film layer thickness of .3 millimeters is insufficient basis for teaching applicant's invention. Applicant respectfully traverses. The material thicknesses in claims 11-14 differ fundamentally from the material thicknesses in Breitscheidel because two fundamentally different products are being described. Applicant and the claims of this application are concerned with a household liner type product. It is something that can be rolled up for sale, spread out by the consumer and cut with a pair of scissors to lay down on a shelf or in a drawer. It must be sufficiently flexible to be rolled up for sale yet lay flat without curling when put in place by the consumer. Breitscheidel on the other hand is teaching panels for use as automotive body panels and the like. These structures are fundamentally different. They will never be capable of being rolled up and sold to a consumer to be smoothed out on a shelf. Rather, they are rigid or semi-rigid structures used in the manufacturing process of an automobile. This fundamental difference is seen in the numbers cited in the Office Action including a film layer thickness of .3 millimeters (almost 12 mils) and a foam layer thickness

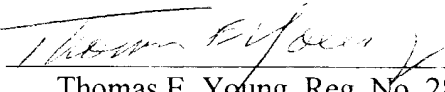
of from 2 to 20 millimeters. 20 millimeters is more than 3/4 inch. Fundamentally different products are being discussed.

In sum, neither Breitscheidel nor any of the other references describe a shelf liner in which a thin polyolefin film not only forms the top surface of a shelf liner but also supports the foam layer during casting and which results in an easily rolled up product which will lay flat without curling. This is the structure recited in applicant's claims. It is submitted that this structure is allowable over the references cited.

Should the Examiner have questions or believe that further amendments to the claims are required, it is requested that the Examiner call applicant's attorney at the below stated number.

Respectfully submitted,

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